



IFWO

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/10/828,919A

DATE: 08/09/2004
 TIME: 09:14:48

Input Set : A:\UGR-100XD1.ST25.txt
 Output Set: N:\CRF4\08092004\J828919A.raw

3 <110> APPLICANT: Adang, Michael J
 4 Kasman, Laura M
 6 <120> TITLE OF INVENTION: Phage Display of the Biologically Active Bacillus
 churingiensis
 7 Toxin
 9 <130> FILE REFERENCE: UGR-100XD1
 11 <140> CURRENT APPLICATION NUMBER: US 10/828,919A
 12 <141> CURRENT FILING DATE: 2004-04-20
 14 <150> PRIOR APPLICATION NUMBER: US 60/146,646
 15 <151> PRIOR FILING DATE: 1999-07-30
 17 <150> PRIOR APPLICATION NUMBER: US 09/629,596
 18 <151> PRIOR FILING DATE: 2000-07-31
 20 <160> NUMBER OF SEQ ID NOS: 14
 22 <170> SOFTWARE: PatentIn version 3.2
 24 <210> SEQ ID NO: 1
 25 <211> LENGTH: 50
 26 <212> TYPE: DNA
 27 <213> ORGANISM: Artificial Sequence
 29 <220> FEATURE:
 30 <223> OTHER INFORMATION: LK01 primer
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 39 <213> ORGANISM: Artificial Sequence
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 51 <213> ORGANISM: Artificial Sequence
 53 <220> FEATURE:
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 65 <220> FEATURE:
 66 <223> OTHER INFORMATION: LK03 primer



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83 atggataaca atccgaacat caatgaatgc
86 <210> SEQ ID NO: 6
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88 <212> TYPE: DNA
89 <213> ORGANISM: Artificial Sequence
91 <220> FEATURE:
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98 <210> SEQ ID NO: 7
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108 Met Asp Asn Asn Pro Asn Ile
109 1           5
112 <210> SEQ ID NO: 8
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114 <212> TYPE: PRT
115 <213> ORGANISM: Artificial Sequence
117 <220> FEATURE:
118 <223> OTHER INFORMATION: N-terminal sequence of synthetic Cry1Ac from Figure 1
120 <400> SEQUENCE: 8
122 Arg Phe Glu Phe Ile Pro Val Thr Ala Thr Leu Glu
123 1           5           10
126 <210> SEQ ID NO: 9
127 <211> LENGTH: 15
128 <212> TYPE: PRT
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132 <223> OTHER INFORMATION: C-terminal sequence of Cry1Ac-fUSE5 and Cry1Ac-Kpn-fUSE5
from
133     Figure 1
136 <220> FEATURE:
137 <221> NAME/KEY: MISC_FEATURE
138 <222> LOCATION: (1)...(3)
139 <223> OTHER INFORMATION: Part of signal sequence
141 <220> FEATURE:

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142 <221> NAME/KEY: MISC_FEATURE
 143 <222> LOCATION: (5)..(8)
 144 <223> OTHER INFORMATION: Junction between signal sequence and C-terminus of synthetic
 145 Cry1Ac
 147 <220> FEATURE:
 148 <221> NAME/KEY: MISC_FEATURE
 149 <222> LOCATION: (9)..(15)
 150 <223> OTHER INFORMATION: C-terminal sequence of synthetic Cry1Ac
 152 <400> SEQUENCE: 9
 154 His Ser Ala Asp Gly Pro Leu Ala Met Asp Asn Asn Pro Asn Ile
 155 1 5 10 15
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 159 <211> LENGTH: 26
 160 <212> TYPE: PRT
 161 <213> ORGANISM: Artificial Sequence
 163 <220> FEATURE:
 164 <223> OTHER INFORMATION: N-terminal sequence of Cry1Ac-fUSE5 and Cry1Ac-Kpn-fUSES

from

165 Figure 1
 168 <220> FEATURE:
 169 <221> NAME/KEY: MISC_FEATURE
 170 <222> LOCATION: (1)..(8)
 171 <223> OTHER INFORMATION: N-terminal sequence of synthetic Cry1Ac
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 175 <222> LOCATION: (9)..(17)
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 179 <221> NAME/KEY: MISC_FEATURE
 180 <222> LOCATION: (18)..(26)
 181 <223> OTHER INFORMATION: Portion of cpIII protein
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 186 1 5 10 15
 189 Ser Gly Ala Glu Thr Val Glu Ser Cys Leu
 190 20 25
 193 <210> SEQ ID NO: 11
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 196 <213> ORGANISM: Artificial Sequence
 198 <220> FEATURE:
 199 <223> OTHER INFORMATION: Protein sequence of WT-fUSE5 from Figure 1
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 204 1 5 10 15
 207 His Ser Ala Asp Val Ala Met Gly Trp Ala Ala Ala Gly Ala Glu Thr
 208 20 25 30
 211 Val Glu Ser Cys Leu
 212 35
 215 <210> SEQ ID NO: 12

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216 <211> LENGTH: 20
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225 <221> NAME/KEY: MISC_FEATURE
226 <222> LOCATION: (1)..(13)
227 <223> OTHER INFORMATION: PelB leader sequence
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231 <222> LOCATION: (14)..(20)
232 <223> OTHER INFORMATION: C-terminal sequence of Cry1Ac
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236 Ala Gly Leu Leu Leu Leu Ala Ala Gln Pro Ala Met Ala Met Asp Asn
237 1 5 10 15
240 Asn Pro Asn Ile
241 20
244 <210> SEQ ID NO: 13
245 <211> LENGTH: 12
246 <212> TYPE: PRT
247 <213> ORGANISM: Artificial Sequence
249 <220> FEATURE:
250 <223> OTHER INFORMATION: Internal sequence of Cry1Ac-SZ from Figure 1
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254 <221> NAME/KEY: MISC_FEATURE
255 <222> LOCATION: (1)..(12)
256 <223> OTHER INFORMATION: Portion of Cry1Ac protein sequence
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261 1 5 10
264 <210> SEQ ID NO: 14
265 <211> LENGTH: 20
266 <212> TYPE: PRT
267 <213> ORGANISM: Artificial Sequence
269 <220> FEATURE:
270 <223> OTHER INFORMATION: N-terminal sequence of Cry1Ac-SZ from Figure 1
273 <220> FEATURE:
274 <221> NAME/KEY: MISC_FEATURE
275 <222> LOCATION: (1)..(4)
276 <223> OTHER INFORMATION: Portion of Cry1Ac protein sequence
278 <220> FEATURE:
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280 <222> LOCATION: (5)..(11)
281 <223> OTHER INFORMATION: Junction between Cry1Ac and cpIII
283 <220> FEATURE:
284 <221> NAME/KEY: MISC_FEATURE
285 <222> LOCATION: (12)..(20)
286 <223> OTHER INFORMATION: Portion of cpIII protein

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288 <400> SEQUENCE: 14

290 Val Ser Asn Leu Ala Ser Gly Gly Gly Ser Pro Phe Val Cys Glu

291 1 5 10 15

294 Tyr Gln Gly Gln

295 20

VERIFICATION SUMMARY

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